(3410-11)

DEPARTMENT OF AGRICULTURE

Forest Service

Diamond Lake Restoration Project, Umpqua National Forest, Douglas County, Oregon

AGENCY: Forest Service, USDA

ACTION: Notice of intent to prepare an environmental impact statement

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SUMMARY: The USDA Forest Service, will prepare an environmental impact statement (EIS) for improvement of water quality and the recreational fishery at Diamond Lake on the Umpqua National Forest. Eradication or control of the existing tui chub (*Gila bicolor*) population, an introduced minnow species, is considered essential for accomplishing restoration objectives. Proposed actions include: canal reconstruction, lake draw down, mechanical fish removal and utilization, a September rotenone (fish toxicant) treatment, fish carcass removal and utilization, water management during lake refilling, monitoring, fish restocking, educational activities, and contingency measures for controlling tui chub if they are reintroduced to Diamond Lake in the future. The planning area is located approximately 61 miles east of Roseburg, Oregon and 11 miles north of Crater Lake. The project is expected to be implemented in 2004 through 2006. The agency gives notice of the full environmental analysis and decision-making process that will occur on the proposal so that interested and affected people may become aware of how they can participate in the process and contribute to the final decision.

DATES: Comments concerning the scope of the analysis should be received in writing, by May 30, 2003.

ADDRESSES: Send written comments and suggestions concerning this proposal to James A. Caplan, Forest Supervisor, Umpqua National Forest, 2900 NW Stewart Parkway, Roseburg, Oregon 97470

FOR FURTHER INFORMATION: Direct questions about the proposed action or EIS to Sherri L. Chambers, ID Team Leader, North Umpqua Ranger District, 18782 North Umpqua Highway, Glide, Oregon 97443, or (541) 496-3532.

SUPPLEMENTARY INFORMATION: The area being analyzed in the Diamond Lake Restoration Project EIS encompasses Diamond Lake proper, Lake Creek, Lemolo Lake, and the North Umpqua River. The project area is Diamond Lake proper, an approximately 3,031acre lake located on National Forest System land on the Diamond Lake Ranger District. The project area is bounded to the North by the North Umpqua River, to the South by Crater Lake, to the East by Mt. Thielsen, and to the West by Mt. Bailey. The project area includes all or portions of sections 30 through 32, T27S, R6E; sections 25 and 36, T27S, R5E; sections 4 through 9 and sections 16 through 21, T28S, R51/2E; and sections 1 and 12, T28S, R5E Willamette Meridian, Douglas County, Oregon.

Purpose and Need for Action. The proposed action is based on the need for improvement of Diamond Lake's water quality and recreational fishery. Diamond Lake is included in the Oregon Department of Environmental Quality's (ODEQ) 303(d) list of water quality limited water bodies for the parameters of pH and algae. In the summers of 2001 and 2002, Diamond Lake experienced severe blooms of the blue-green "algae" *Anabaena flos-aquae.* This type of algae produces a neuro-toxin that in high concentrations is harmful to humans and other animals. To protect public health and

safety, the Umpqua National Forest in cooperation with the Douglas County Health Department closed Diamond Lake to some public uses (wading, swimming, water skiing, and boating) during portions of both summers. Changes in lake ecology associated with overpopulation of the lake by tui chub are believed to be the primary factors influencing the development of toxic algae blooms at Diamond Lake.

For several decades, Diamond Lake has supported a large and popular recreational trout fishery of some importance to the local and regional economy. In recent years, the recreational fishery at Diamond Lake has declined dramatically from a high annual average harvest rate of about 270,000 trout during the 1963-1978 time period to a 1999 low annual harvest rate of 5,000 trout. Failure of the formerly successful recreational fishery is attributed largely to changes in lake ecology caused by overpopulation of the lake by tui chub.

Proposed Action. The proposed action is to eradicate tui chub from Diamond Lake as an essential step in improving water quality and the recreational fishery. Proposed activities are described below in the order in which they would be implemented.

- A blocked and debris-filled existing earthen canal that connects Diamond Lake to Lake Creek would be reconstructed to facilitate a lake draw down. The portion of the canal within Diamond Lake would be dredged to its original depth using a floating suction dredge. Dredge spoils would be used to expand an existing wetland. From the lakeshore to the canal outlet, the canal would be excavated to its original configuration and fitted with a new head-gate structure to control water flow. If necessary, new bridges or culverts would be constructed over the canal to maintain access to the bike trail and

summer cabins using Forest Service Road 4795.

-Diamond Lake's water level would be lowered by eight feet from its normal summer level, by using both the reconstructed canal and Lake Creek for water transport. The lake draw down would begin on or around September 15 in the year prior to a chemical treatment. A gravity-driven draw down would occur at a discharge rate approximating a bankfull flow in Lake Creek.

-Several methods would be used to remove and utilize fish biomass from Diamond Lake prior to chemical treatment including: liberalizing catch limits on fishing at the lake; harvest of fish by individual crews using traps, nets and seines; and, harvest of fish through commercial fishing operations. Harvested fish carcasses would be converted to an organic fish emulsion product on site (lake shore) or trucked to an off-site plant for utilization as fertilizer.

-The powdered formulation of the fish toxicant rotenone would be applied to Diamond Lake in September**.** This would happen when water temperature and chemistry reached conditions considered optimal for achieving a complete fish kill. Rotenone would be administered according to label instructions at the necessary amounts based on water volume, temperature, and chemistry in Diamond Lake at the time of application. Sections of Silent Creek and Lake Creek would also be treated with liquid rotenone.

-A commercial fishing or professional fish mortality recovery and recycling operation would be employed to collect fish carcasses following a chemical treatment of the lake. Fish carcasses would be converted to an organic fish emulsion product on site or trucked to an off-site plant for utilization as fertilizer.

- An active water management strategy would be implemented to limit the length

of time that Lake Creek is reduced to no or very low flows. When water in Diamond Lake becomes suitable for release (about November), canal headgates would be opened to allow approximately 10 cubic feet per second (cfs) of water to flow into Lake Creek and through the North Umpqua River system.

-A variety of monitoring activities would be used to verify assumptions, evaluate project success, and formulate appropriate lake management strategies including: stream flows and water quality in Lake Creek; water quality in Diamond and Lemolo Lakes and the North Umpqua River; tui chub presence; and phytoplankton, zooplankton and benthic invertebrate and trout populations.

-Diamond Lake would be restocked with fish using an ecologically appropriate stocking strategy. The Oregon Department of Fish and Wildlife would manage the lake for hatchery production under the basic yield alternative of Oregon's Trout Plan. However, ecological indices of lake health, existing data and knowledge, annual fish monitoring data and guidance provided in ODEQ's pending Total Maximum Daily Load (TMDL) publication would be used to determine appropriate numeric goals for annual fish stocking and harvest post-project.

-A number of educational activities would be considered to reduce the likelihood of tui chub reintroduction into Diamond Lake including: "angler stamps", interpretive signs and brochures, and boat inspections.

-Because it is recognized that tui chub may be illegally reintroduced, several actions designed to control tui chub populations would be implemented including: an extensive monitoring program to facilitate early detection of tui chub presence in the lake; stocking with predacious fish species following rotenone treatment and increasing

the numbers of predacious fish if tui chub are detected; and using mechanical treatments such as netting and electro-shocking to limit tui chub population growth.

Alternatives. The alternatives to be considered include the No Action Alternative, the Proposed Action, and alternatives to the proposed action.

Issues. Preliminary issues, as identified to date by the Forest and by scoping, include the following: Potential affects of rotenone on non-target species in and around Diamond Lake; Potential affects of rotenone on non-target species in the North Umpqua River if treated water escaped Diamond Lake through Lake Creek or groundwater; Potential affects of a lake draw down on the physical integrity of Lake Creek and on water quality in Lake Creek, Lemolo Lake, and the North Umpqua River; Potential affects of added nutrients from decomposed fish on water quality in Lake Creek, Lemolo Lake, and the North Umpqua River; The ecologic and economic expense of the proposed action, if history repeated itself and another chemical treatment were needed to eliminate tui chub in the next several decades; The ability and effectiveness of the proposed action to improve water quality in Diamond Lake; and the concern that legislative action would be used to establish fish stocking goals if the proposed ecologically based fish stocking strategy failed to provide an adequate recreational fishery.

Scoping Process. The scoping effort is intended to identify issues, which may lead to the development of alternatives to the proposed action. One of the purposes of this notice of intent is to solicit input from the public as part of the overall scoping effort. In addition to this notice, the public will be notified of the EIS through the Umpqua National Forest's April 2003 Schedule of Proposed Actions.

Public Comments. Comments received in response to this notice and through scoping, including names and addresses of those who comment, will be considered part of the public record on this proposed action and will be available for public inspection. Comments submitted anonymously will be accepted and considered; however, those who submit anonymous comments will not have standing to appeal the subsequent decision under 36 CFR Parts 215. Additionally, pursuant to 7 CFR 1.27(d), any person may request the agency to withhold a submission from the public record by showing how the Freedom of Information Act (FOIA) permits such confidentiality. Persons requesting such confidentiality should be aware that, under the FOIA, confidentiality may be granted in only very limited circumstances, such as to protect trade secrets. The Forest Service will inform the requester of the agency's decision regarding the request for confidentiality, and where the request is denied, the agency will return the submission and notify the requester that the comments may be resubmitted with or without name and address within a specified number of days.

Public comments are appreciated throughout the analysis process. The draft EIS is expected to be filed with the Environmental Protection Agency (EPA) and be available for public review by February 2004. The comment period on the draft EIS will be 45 days from the date the EPA publishes the notice of availability in the Federal Register. The final EIS is scheduled to be available in May 2004.

The Forest Service believes it is important to give reviewers notice of this early stage of public participation and of several court rulings related to public participation in the environmental review process. First, reviewers of a draft EIS must structure their participation in the environmental review of the proposal so that it is meaningful and

alerts an agency to the reviewer's position and contentions. Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519, 553 (1978). Also, environmental objections that could have been raised at the draft stage may be waived or dismissed by the court if not raised until after completion of the final EIS. City of Angoon v. Hodel, 803 f.2d 1016, 1022 (9th Cir, 1986) and Wisconsin Heritages, Inc. v. Harris, 490 F. Supp. 1334, 1338 (E.D. Wis. 1980). Because of these court rulings, it is very important that those interested in this proposed action participate by the close of the 45-day comment period so substantive comments and objections are made available to the Forest Service at a time when it can meaningfully consider and respond to them in the final EIS.

To assist the Forest Service in identifying and considering issues and concerns on the proposed action, comments on the draft EIS should be as specific as possible. It is also helpful if comments refer to specific pages or chapters of the draft statement. Comments may also address the adequacy of the draft EIS or the merits of the alternatives formulated and discussed in the statement. (Reviewers may wish to refer to the Council on Environmental Quality Regulations for implementing the procedural provisions of the National Environmental Policy Act of 40 CFR 1503.3 in addressing these points.)

In the final EIS, the Forest Service is required to respond to substantive comments and responses received during the comment period that pertain to the environmental consequences discussed in the draft EIS and applicable laws, regulations, and policies considered in making a decision regarding the proposal. The Responsible Official is Forest Supervisor of the Umpqua National Forest. The Responsible Official will

document the Diamond Lake Restoration Project decision and rationale for the decision in a Record of Decision. The decision will be subject to review under Forest Service Appeal Regulations (36 CFR Part 215).

/s/ James A. Caplan April 18, 2003
JAMES A. CAPLAN Date
Forest Supervisor